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## Address Change Service

# Technical Guide

This guide is a supplement to USPS Publication 8, *Address Change Service*. It is provided to furnish technical information for mailers who intend to use Address Change Service (ACS) as a fulfillment vehicle for address change notifications. In addition, the layout of the ACS fulfillment file presented in this guide reflects an enhanced ACS fulfillment record and supersedes the layouts found in all earlier ACS literature.

This guide details mailpiece modification including placement of the ACS Participant Code and Keyline, mailpiece endorsements, and placement of ZIP+4 or Delivery Point Bar Codes. It also describes the ACS fulfillment file and details the various types of records that may be found in it.

The Appendix contains the instructions to calculate the ACS Keyline check digit.

A thorough description of the ACS system may be found in USPS Publication 8, *Address Change Service*.

Any questions, comments, or requests for additional information should be directed to:

> ADDRESS CHANGE SERVICE DEPARTMENT
> NATIONAL CUSTOMER SUPPORT CENTER
> UNITED STATES POSTAL SERVICE
> 6060 PRIMACY PKWY STE 101
> MEMPHIS TN  38188-0001

We can be reached by telephone at 1-800-331-5746 from 8:00 a.m. until 5:00 p.m. Central time Monday through Friday.

In order to participate in ACS, mailers must modify the layout of their mailing address labels or address blocks to incorporate the necessary ACS information.

## ACS PARTICIPANT CODE

The ACS Participant Code, which consists of 7 alpha characters, is assigned by the Postal Service. It is printed on the first line of the address block (the Optional Endorsement Line), left-justified, preceded by a single pound sign (#) delimiter, and followed by at least 1 space if any other information (Carrier Route Sort, etc.) is printed on that line.

## ACS KEYLINE

The ACS Keyline is a sequence of alpha and/or numeric characters generated by the mailer. If the mailer has elected to use the Keyline option, the Keyline is returned as part of an ACS fulfillment record and is used as a key to locate the moving customer on the mailer's address database. The ACS Keyline consists of 4 to 16 characters, including a numeric check digit that is calculated using the USPS Standard for Check Digit Computation found in Appendix A of this Guide. If the Keyline option is selected for a given Participant Code, *all mailpieces bearing that Participant Code must also bear a Keyline.* In order to receive electronic Nixie notifications*, the Keyline option must be used.

*\* Note:*    Nixie notifications *are notifications of mailpieces that were undeliverable **for reasons other than a customer move** and cannot be forwarded. ACS Nixie notifications do not contain Old or New Address information.*

        *First-class ACS mailers, as well as third-class and fourth-class mailers using the mailpiece endorsement* Forwarding and Return Postage Guaranteed, Address Correction Requested*, will not receive any electronic Nixie notifications since these mailpieces must be physically returned to the mailer with nondelivery information attached. Mailers who do not use the Keyline option will not receive Nixie notifications.*

        *USPS Publication 8,* Address Change Service, *contains a thorough discussion of the various types of records that may be found in an ACS fulfillment file.*

The Keyline is printed on the second line of the address block, left-justified, with beginning and ending pound sign (#) delimiters. It may contain single spaces to enhance readability. Neither the pound sign delimiters nor any embedded spaces are counted toward the 16-character length limit and are not returned as part of an ACS record. Any other information printed on the second line of the address block must follow the trailing pound sign delimiter, and will be ignored by ACS processing.

The content of individual Keylines should be unique to ensure identification of a particular customer within a mailer's address file. However, all Keylines for a given ACS Participant Code must be consistent in terms of Keyline characteristics, which are as follows:

- Length: Keylines must be consistent in length

- Attribute: alpha, numeric, or alphanumeric
    - Alpha Keylines may contain: the letters A through Z
        the forward slash (/)
        the check digit- the only allowable numeric character
    - Numeric Keylines may contain only the digits zero (0) through nine (9)
    - Alphanumeric Keylines must contain at least one numeric and one alpha character.

All ACS Keylines must end with the correctly-calculated numeric check digit.

## MAILPIECE ENDORSEMENT

ACS-modified mailpieces for First-, Third-, and Fourth-class mailers must carry an approved mailpiece endorsement, which instructs the Postal Service as to the disposition of undeliverable-as-addressed mailpieces and the provision of address correction information. The mailpiece endorsements authorized for use by ACS mailers are as follows:

| Mail Class | ACS-Authorized Endorsement(s) |
|---|---|
| First | 'Forwarding and Address Correction Requested' |
| Third | 'Address Correction Requested' or |
| | 'Forwarding and Return Postage Guaranteed, Address Correction Requested' |
| Fourth | 'Forwarding and Return Postage Guaranteed, Address Correction Requested' or |
| | 'Do Not Forward, Do Not Return, Address Correction Requested' |

USPS Publication 8, *Address Change Service*, details the endorsements that are approved for use in the various classes of ACS and describes the ramifications of each. Refer to the latest issue of *Domestic Mail Manual* for endorsement placement guidelines and regulations.

# BARCODING

ACS mailers who use ZIP+4 barcoding or delivery point barcoding may wish to place the barcode information in the address block. If so, acceptable locations are:

- Above the top line of the name and address information and below the ACS Keyline *(This is the preferred location.)*

- Below the CITY-STATE-ZIP CODE line, or

- Above the ACS Participant Code/Optional Endorsement Line.

Refer to section C840.2 of the *DMM*, Issue 47 (April 10, 1994) or later, for current barcode location guidelines.

## Sample Mailing Labels Before and After ACS Modification

*Before*

```
 * * * * * * * * * * * *  5-DIGIT 28732
JNS0069TWK287       EXP JUN 93
JESSICA H JONES
69 TWO OAKS DR
FLETCHER NC  28732-9499
```

*After*

```
#BXBJDCK  * * * 5-DIGIT    28732
#JNS0069TWK2874#   EXP JUN 93
JESSICA H JONES
69 TWO OAKS DR
FLETCHER NC  28732-9499
```

## Sample Mailing Label Using ZIP+4 Barcoding

```
#BXBJDCK * * * 5-DIGIT     28732
#JNS0069TWK2874#    EXP JUN 93
|ıl|ılıılıılıılıılılllıılılllıılılılıılıılllıılılıılll
JESSICA H JONES
69 TWO OAKS DR
FLETCHER NC  28732-9499
```

*Note:    ACS mailpieces using barcoding must meet all requirements for barcodes as set forth in DMM section C840, 'Barcoded Mailpieces'.*

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**Sample Mailing Label Demonstrating ACS/TCMAS  Compatibility**

```
#BTWTWTW#00000 * * 5-DIG 28732
#JNS0069TWK2874#      EXP JUN 93
JESSICA H JONES
69 TWO OAKS DR
FLETCHER NC  28732-9499
```

Mailers participating in more than one system (ACS, EX3C, BBM/SPMS, etc.) must be approved and activated in each system separately.

If you are unsure whether your Participant Code has been approved for use in other systems, contact the Address Change Service Section for assistance.

**FULFILLMENT FILE PROCESSING OPTIONS**

The ACS fulfillment file comes in several magnetic media formats. The various fulfillment file options are outlined below:

|      | *Media Type* | *Density* | *Rec. Length* | *Blocksize* | *Format* | *Internal Labels* |
|------|--------------|-----------|---------------|-------------|----------|-------------------|
| A.   | 9-track tape | 1600 BPI  | 425           | 17000       | EBCDIC   | IBM Standard      |
| B.   | 9-track tape | 1600 BPI  | 425           | 6375        | EBCDIC   | IBM Standard      |
| C.   | *(Telecommunications option - see below)* | | | | | |
| D.*  | 9-track tape | 6250 BPI  | 425           | 17000       | EBCDIC   | IBM Standard      |
| E.   | 9-track tape | 6250 BPI  | 425           | 6375        | EBCDIC   | IBM Standard      |
| F.   | 3480 cartridge | 38K BPI | 425           | 17000       | EBCDIC   | IBM Standard      |
| G.   | 5 1/4" diskette | DSHD   | 425**         | N/A         | DOS (ASCII) | N/A            |
| H.   | 3 1/2" diskette | DSHD   | 425**         | N/A         | DOS (ASCII) | N/A            |

> *\* "D" is the standard format. You will be sent tapes in this format unless you notify the Address Change Service Department that you wish to receive another format.*
>
> *\*\* Each 425-character record in a diskette fulfillment file is terminated by a carriage return and linefeed (ASCII characters 13 and 10) for a total of 427 characters in the record.*

ACS fulfillment files are provided to participating mailers daily, semiweekly, weekly, semimonthly, or monthly, depending upon their particular needs and ACS volume. Due to increased processing costs, customers wishing to receive fulfillment files more frequently than twice per week must meet the volume requirements for the telecommunications option and must convert to receiving their files via telecommunications within six months after implementation.

The fulfillment file will be sent along with an accompanying shipping notice listing the number of notifications (by Participant Code) being provided. Tapes and cartridges must be returned to the National Customer Support Center ( NCSC) within 5 days of receipt. A preaddressed, prepaid, first-class mailing label is enclosed with each shipment for this purpose. Diskettes are non-returnable.

**TELECOMMUNICATIONS OPTION**

ACS mailers who meet certain minimum volume requirements (as outlined in USPS Publication 8, *Address Change Service*) may choose to receive their ACS notifications via a regularly-scheduled telecommunications transmission rather than being sent physical magnetic media.

The telecommunication process involves ACS mailers dialing into the NCSC's computer system on a regularly-scheduled basis to receive their files. Users will incur all telephone line usage costs along with any hardware or software configuration costs.

The ACS telecommunications option is supported using one of the following 3 methods:

1.  IBM NetView File Transfer Program Version 2, Release 1, Number 5685-108.  This method is for IBM host systems to receive the file.

2.  IBM PC 3270 Emulation Program Version 3.0, Number 5871-AAA with feature code 9969 and IBM SDLC board, Number 5150-ZZZ with feature code 1205. This method allows the file to be received on an IBM PC/XT, AT, or compatible.

3.  RJE 3770/SDLC under NCP version 4, Number 5668-854. This method is for non-IBM systems with 3770/SDLC capability to receive the file.

The data modem used at the National Customer Support Center is a 9600 baud synchronous Racal-Milgo, Model 9632.


## ACS FULFILLMENT FILE RECORDS

ACS fulfillment files contain a header record, followed by any Nixie records and then the actual Change of Address (COA) records. If an ACS participant has more than one Participant Code, the notifications will be grouped in the file by Participant Code. To interpret an ACS fulfillment record, we recommend that you first read the Deliverability Code field, position 38, which reflects the type of notification.

**ACS FULFILLMENT FILE HEADER RECORD FORMAT**

| FIELD ID | POSITION | LENGTH | TYPE |
|---|---|---|---|
| Tape-Header-Indicator | 1 | 1 | A |
| Tape-Header-Customer-ID | 2 – 7 | 6 | N |
| Tape-Header-Date | 8 – 13 | 6 | N |
| Tape-Header-Total-Count | 14 – 22 | 9 | N |
| Tape-Header-COA-Count | 23 – 31 | 9 | N |
| Tape-Header-Nixie-Count | 32 – 40 | 9 | N |
| Tape-Header-Shipment-Number | 41 – 48 | 8 | N |
| Tape-Header-Mail-Class | 49 | 1 | N |
| Tape-Header-Media-Type | 50 | 1 | A |
| Filler | 51 – 425 | 375 | X |
| *Total Record Length = 425 Characters* | | | |

**DESCRIPTION OF HEADER RECORD FIELDS**

1. **Tape-Header-Indicator.** Contains an indicator to identify this record as the header record. Field length is 1 character: alpha— value = 'H'.

2. **Tape-Header-Customer-ID.** Contains a value unique to each ACS customer assigned by the NSCS. Field length is 6 characters: numeric.

3. **Tape-Header-Date.** Contains the date that the file was created. Format is YYMMDD. Field length is 6 characters: numeric.

4. **Tape-Header-Total-Count.** Contains the total number of ACS fulfillment records provided in the file. Field length is 9 characters: numeric.

5. **Tape-Header-COA-Count.** Contains the total number of changes of address in the file. Field length is 9 characters: numeric.

6. **Tape-Header-Nixie-Count.** Contains the total number of Nixies in the file. Field length is 9 characters: numeric.

7. **Tape-Header-Shipment-Number.** Contains the unique number for this production shipment. It corresponds to the Shipment Number on your invoice. Field length is 8 characters: numeric.

8. **Tape-Header-Mail-Class.** Contains the customer's mail class. Field length is 1 character: numeric.

9. **Tape-Header-Media-Type.** Contains the media in which fulfillment file is sent. Field length is 1 character: alpha.

10. **Filler.** This field is filler padded with spaces to bring the total record length to 425 characters. Field length is 375 characters.

## ACS FULFILLMENT FILE NIXIE RECORD FORMAT

| FIELD ID | POSITION | LENGTH | TYPE |
|---|---|---|---|
| Record Type ID | 1 | 1 | N |
| Sequence Number | 2 – 9 | 8 | N |
| Participant Code | 10 – 16 | 7 | A |
| Keyline | 17 – 32 | 16 | A/N |
| Filler | 33 – 37 | 5 | X |
| Deliverability Code | 38 | 1 | A |
| USPS Site ID | 39 – 41 | 3 | N |
| Filler | 42 – 207 | 166 | X |
| Old ZIP Code | 208 – 212 | 5 | A/N |
| Filler | 213 – 425 | 213 | X |
| *Total Record Length = 425 Characters.* | | | |

## ACS FULFILLMENT FILE COA RECORD FORMAT

| FIELD ID | POSITION | LENGTH | TYPE |
|---|---|---|---|
| Record Type ID | 1 | 1 | N |
| Sequence Number | 2 – 9 | 8 | N |
| Participant Code | 10 – 16 | 7 | A |
| Keyline | 17 – 32 | 16 | A/N |
| Move Effective Date | 33 – 36 | 4 | N |
| Move Type | 37 | 1 | A/N |
| Deliverability Code | 38 | 1 | A |
| USPS Site ID | 39 – 41 | 3 | N |
| COA Name | 42 – 88 | 47 | A/N |
| Old Address Type | 89 | 1 | A |
| Old Urbanization Name | 90 – 117 | 28 | A/N |
| Parsed Old Address | 118 – 177 | 60 | A/N |
| Old City-State-ZIP | 178 – 212 | 35 | A/N |
| New Address Type | 213 | 1 | A |
| New UrbanizationName | 214 – 241 | 28 | A/N |
| Parsed New Address | 242 – 301 | 60 | A/N |
| New City-State-ZIP | 302 – 344 | 43 | A/N |
| Label Format New Address | 345 – 410 | 66 | A/N |
| Filler | 411 – 424 | 14 | X |
| Class/Notification Type | 425 | 1 | A |
| *Total Record Length = 425 Characters.* | | | |

# DESCRIPTION OF ACS FULFILLMENT RECORD FIELDS

1. **Record Type ID.** This field identifies the origin of the ACS notification. CFS-generated COA or Nixie records will contain a 2. Field length is 1 character: numeric.

2. **Sequence Number.** This is a record number sequence within each Participant Code group. It is reset to 00000001 at the beginning of each group. Field length is 8 characters: numeric; right-justified; padded with zeros.

3. **Participant Code.** The USPS-assigned Participant Code. It consists of 7 alpha characters. Field length is 7 characters: alpha.

4. **Keyline.** If the ACS Keyline option was selected for this Participant Code, this field will contain the Keyline presented on the ACS-modified mailpiece with any embedded spaces removed. If the Keyline option was not chosen, this field will be filled with spaces. Field length is 16 characters: alpha/numeric; left-justified; padded with spaces.

5. **Move Effective Date.** The month and year that the customer's move became effective, as stated on USPS Form 3575. Format is YYMM. Example: April 1993 would be presented as '9304'. Field length is 4 characters: numeric.

6. **Move Type.** The type of move as indicated on the customer's USPS Form 3575. Possible values are:

   > F—Family move
   > I—Individual move
   > B—Business move

   Field length is 1 character: alpha.

7. **Deliverability Code.** This field indicates the deliverability status of the mailpiece that generated this notification. The Deliverability Code indicates one of three situation types:

- A space in this position indicates that the mailpiece was matched with a Change of Address Order, and New Address information is being provided as part of this ACS record.

- A 'K', 'G', or 'C' in this position indicates that the mailpiece was matched with a Change of Address Order, but New Address information is unknown. The reason is coded as follows:

> K—Moved, left no address
> G—PO Box closed
> C—Not deliverable as addressed

- Any other character in this position identifies the mailpiece as a Nixie, which is a mailpiece that is undeliverable **for a reason other than a customer move**. Nixie codes are as follows:

| | |
|---|---|
| A—Attempted, not known | P—Returned for postage |
| B—Returned for better address | Q—Not deliverable as addressed |
| D—Outside delivery limits | R—Refused |
| E—In dispute | S—No such street |
| I—Insufficient address | U—Unclaimed |
| L—Illegible | V—Vacant |
| M—No mail receptacle | W—Temporarily Away |
| N—No such number | X—No such office |

> Field length is 1 character; alpha.

8. **USPS Site ID.** This is the Site ID number that identifies which CFS site generated the ACS notification. Field length is 3 characters: numeric.

9. **COA Name.** This field contains the moving customer's name as provided on the PS Form 3575 Change of Address Order. It is important to note that this name may not exactly match the customer's name as it appears on your mailing list.

If the Move Type is (F)amily or (I)ndividual, then the COA Name field is 'parsed', or subdivided, into the following components:

| Parsed Subfield | Position | Length |
|---|---|---|
| Surname | 42 – 61 | 20 |
| First name, middle initial, etc. | 62 – 76 | 15 |
| Prefix | 77 – 82 | 6 |
| Suffix | 83 – 88 | 6 |

A '%' symbol in the Surname subfield should be interpreted as 'in care of'. For example, if positions 42 through 88 contain:

'JONES   %   SMITH      BARBARA           '

it should be read as 'BARBARA JONES in care of SMITH' at the New Address.

If the Move Type is (B)usiness, then the entire COA Name field is not parsed, but is treated as a single 47-character business name field.

     Total field length is 47 characters: alpha/numeric; left-justified; padded with spaces.

10. **Old Address Type.** This field indicates the type of address from which the customer is moving. Valid types  of Old Addressses are as follows:

         S—Street Address                H—Highway Contract
         G—General Delivery           X—Rural Route w/Box Number
         P—PO Box                     V—Highway Contract w/Box Number
         R—Rural Route

     Field length is 1 character: alpha.

11. **Old Urbanization Name.** This field contains an area, sector, or development within a Puerto Rico urbanization area from which the customer is moving. Total Field length is 28 characters: alphanumeric.

12. **Parsed Old Address.** This field contains the delivery address from which the customer is moving.  It is parsed into the following component subfields:

| PARSED SUBFIELD | POSITION | LENGTH |
|---|---|---|
| Primary Number | 118 – 127 | 10 |
| Pre-directional | 128 – 129 | 2 |
| Street Name | 130 – 157 | 28 |
| Street Suffix | 158 – 161 | 4 |
| Post-directional | 162 – 163 | 2 |
| Unit Designator | 164 – 167 | 4 |
| Secondary Number | 168 – 177 | 10 |

If the Old Address Type is (P)O Box, (R)ural Route, or (H)ighway Contract, the Primary Number subfield will contain the relevant PO Box, route, or contract number. The Street Name subfield will contain 'PO BOX', 'RR', or 'HC', respectively.

If the Old Address Type is (X)—Rural Route with Box Number or (V)—Highway Contract with Box Number, the Primary Number subfield will contain the relevant route or contract number, and the Secondary Number subfield will contain the associated box number. The Street Name subfield will contain 'RR' or 'HC', respectively.

All subfields outlined within the Old Address will be left-justified and padded with spaces. If any components are not present in an address (e.g., no Pre-directional required), then those positions will be filled with spaces. Total field length is 60 characters; alpha/numeric.

13. **Old City-State-ZIP.** This field identifies the City, State, and ZIP Code associated with the Old Address. It is parsed into the following component subfields:

| PARSED SUBFIELD | POSITION | LENGTH |
|---|---|---|
| City | 178 – 205 | 28 |
| State | 206 – 207 | 2 |
| 5-Digit ZIP Code | 208 – 212 | 5 |

Total field length is 35 characters; alpha/numeric.

14. **New Address Type.** This field indicates the type of address to which the customer is moving. Valid types of New Address are as follows:

S—Street Address        H—Highway Contract
G—General Delivery      X—Rural Route w/Box Number
P—PO Box             V—Highway Contract w/Box Number
R—Rural Route         F—Foreign

Field length is 1 character: alpha.

15. **New Urbanization Name.** This field contains the area, sector, or development within a Puerto Rico urbanization area to which the customer is moving. Total length is 28 characters: alphanumeric.

16. **Parsed New Address.** This field contains the delivery address to which the customer is moving. It is parsed into the following component subfields:

| PARSED SUBFIELD | POSITION | LENGTH |
|---|---|---|
| Primary Number | 242 – 251 | 10 |
| Pre-directional | 252 – 253 | 2 |
| Street Name | 254 – 281 | 28 |
| Street Suffix | 282 – 285 | 4 |
| Post-directional | 286 – 287 | 2 |
| Unit Designator | 288 – 291 | 4 |
| Secondary Number | 292 – 301 | 10 |

If the New Address Type is (P)O Box, (R)ural Route, or (H)ighway Contract, the Primary Number subfield will contain the relevant PO Box, route number, or contract number. The Street Name subfield will contain 'PO BOX', 'RR', or 'HC', respectively.

If the New Address Type is (X)—Rural Route with Box Number or (V)—Highway Contract with Box Number, the Primary Number subfield will contain the relevant route or contract number, and the Secondary Number subfield will contain the associated box number. The Street Name subfield will contain 'RR' or 'HC', respectively.

If the New Address Type is (F)oreign, then the New Address will not be parsed. It will be treated as a single 60-character field.

All subfields outlined within the New Address will be left-justified and padded with spaces. If any components are not present in a particular address, then those subfields will be filled with spaces. Total field length is 60 characters.

17. **New City-State-ZIP.** This field identifies the City, State, and ZIP Code associated with the New Address. It is parsed into its component subfields as follows:

| *PARSED SUBFIELD* | *POSITION* | *LENGTH* |
|---|---|---|
| City | 302 – 329 | 28 |
| State | 330 – 331 | 2 |
| 5-Digit ZIP Code | 332 – 336 | 5 |
| Hyphen | 337 | 1 |
| ZIP+4 Add-on Code | 338 – 341 | 4 |
| DPBC Information | 342 – 344 | 3 |

If the New Address Type is (F)oreign, then the New City-State-ZIP field will not be parsed. It will be treated as a single 43-character field. Total field length is 43 characters: alpha/numeric.

18. **Label Format New Address.** This field contains the New Address components concatenated into a label format with extraneous spaces removed. It may be output in this format directly to a mailing label. Field length is 66 characters: alpha/numeric; left-justified; padded with spaces.

19. **Filler.** This field is padded with spaces. Field length is 14.

20. **Class/Notification Type.** This field identifies the mail class carried by the mailpiece that generated this ACS notification.  Possible values are:

| VALUE | MAIL CLASS |
|-------|------------|
| A | (Reserved for future use) |
| B | First-Class |
| C | Second-Class, Initial Notification |
| D | Third-Class |
| E | Fourth-Class |
| F | Second-Class, Follow Up Notification |

Field length is 1 character: alpha.

# Appendix A    *The USPS Standard for Check Digit Computation*

ACS mailers using the Keyline option must use the following algorithm to compute the check digit:

1.  Consider the Keyline as an ASCII string of 3 to 15 characters, removing any spaces before beginning calculation.

2.  Convert the remaining characters to pure numeric values by zeroing out the higher 4 bits. This will yield the following values for each alpha character (numeric characters retain their value):

    | | | | | | | |
    |---|---|---|---|---|---|---|
    | A = 1 | E = 5 | I = 9 | M = 13 | Q = 1 | U = 5 | Y = 9 |
    | B = 2 | F = 6 | J = 10 | N = 14 | R = 2 | V = 6 | Z = 10 |
    | C = 3 | G = 7 | K = 11 | O = 15 | S = 3 | W = 7 | |
    | D = 4 | H = 8 | L = 12 | P = 0 | T = 4 | X = 8 | / = 15 |

3.  Multiply the value at each odd-numbered position (first position, third position, fifth position, etc.) by a weighting factor of 2.

4.  Total the digits (not the actual value) in all positions. For example, if the second position of the Keyline is 'L' with a value of 12, add the digits 1+2 (not the value 12) to the sum.

*Note:    The letter 'N' in an odd position, when weighted, becomes 14\*2=28. The digits 2 and 8 are added together giving 10, which is then further interpreted as 1+0, not the sum 10.*

5.  Subtract the rightmost digit of the sum from 10. This result is the check digit.

*Note:    If the rightmost digit is 0, then the check digit is 0.*

### Example for Computation of Check digit for Keyline JLSTMS6796

| Character | J | L | S | T | M | S | 6 | 7 | 9 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Position | 1 (O) | 2 (E) | 3 (O) | 4 (E) | 5 (O) | 6 (E) | 7 (O) | 8 (E) | 9 (O) | 10(E) |
| Value | 10 | 12 | 3 | 4 | 13 | 3 | 6 | 7 | 9 | 6 |
| Weighting Factor | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 |
| Weighted Value | 20 | 12 | 6 | 4 | 26 | 3 | 12 | 7 | 18 | 6 |
| Sum | 2+0 | +1+2 | +6 | +4 | +2+6 | +3 | +1+2 | +7 | +1+8 | +6 |

Total sum = 51; rightmost digit of Sum = 1.

Check digit = 10 - 1 = 9.   Complete Keyline = JLSTMS67969.

## Example for Computation of Check Digit for Keyline TMS1112/62

| Character | T | M | S | 1 | 1 | 1 | 2 | / | 6 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Position | 1 (O) | 2 (E) | 3 (O) | 4 (E) | 5 (O) | 6 (E) | 7 (O) | 8 (E) | 9 (O) | 10(E) |
| Value | 4 | 13 | 3 | 1 | 1 | 1 | 2 | 15 | 6 | 2 |
| Weighting Factor | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 |
| Weighted Value | 8 | 13 | 6 | 1 | 2 | 1 | 4 | 15 | 12 | 2 |
| Sum | 8 | +1+3 | +6 | +1 | +2 | +1 | +4 | +1+5 | +1+2 | +2 |

Total sum = 37; rightmost digit of Sum = 7.

Check digit = 10 - 7 = 3.   Complete Keyline = TMS1112/623.

## Example for Computation of Check Digit for Keyline 218XN91LMS

| Character | 2 | 1 | 8 | X | N | 9 | 1 | L | M | S |
|---|---|---|---|---|---|---|---|---|---|---|
| Position | 1 (O) | 2 (E) | 3 (O) | 4 (E) | 5 (O) | 6 (E) | 7 (O) | 8 (E) | 9 (O) | 10(E) |
| Value | 2 | 1 | 8 | 8 | 14 | 9 | 1 | 12 | 26 | 3 |
| Weighting Factor | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 | * 2 | * 1 |
| Weighted Value | 4 | 1 | 16 | 8 | 28 | 9 | 2 | 12 | 26 | 3 |
| Sum | 4 | +1 | +1+6 | +8 | +1+0 | +9 | +2 | +1+2 | +2+6 | +3 |

*Note:   When the letter 'N' is weighted, its value of 14 is doubled to 28. The sum of the digits 2+8=10; the digits are again summed as 1+0=1.*

Total sum = 46;  rightmost digit of Sum = 6.

Check digit = 10 - 6 = 4.   Complete Keyline = 218XN91LMS4.

Below are additional examples of valid ACS Keylines that you may use for testing your algorithm. The check digit is the last character.

```
ABC999NN//32   ANIT0281        0012////8        811NIS0001119
12345678907    09876543213     OTUBIKALAM8      SEIRAMT4
```

**UNITED STATES POSTAL SERVICE** ™

# *Address Change Service*
# *Application*

Class of Mail _____     Company Name _____

## ACS Contact Information

Attn: _____
Company: _____
Address: _____
City: _____
State: _____ ZIP+4: _____
Telephone: _____
Fax: _____

## ACS File Shipping Information

Attn: _____
Company: _____
Address: _____
City: _____
State: _____ ZIP+4: _____
Telephone: _____

## ACS Billing Information

Attn: _____
Company: _____
Address: _____
City: _____
State: _____ ZIP+4: _____
Telephone: _____

## Fulfillment File Options

### File Format

- ☐ A. Tape, 1600 BPI, 17000 Blksize
- ☐ B. Tape, 1600 BPI, 6375 Blksize
- ☐ C. Telecommunications
- ☐ D. Tape 6250 BPI, 17000 Blksize
- ☐ E. Tape 6250 BPI, 6375 Blksize
- ☐ F. Cart, 38K BPI, 17000 Blksize
- ☐ G. DOS Diskette, 5 $\frac{1}{4}$" DSHD
- ☐ H. DOS Diskette, 3 $\frac{1}{2}$" DSHD

### Delivery Schedule

- ☐ Daily
- ☐ Semi-weekly
- ☐ Weekly
- ☐ Semi-monthly
- ☐ Monthly

## ACS Notification Option

(Second Class Only)

- ☐ Option 1
- ☐ Option 2
- ☐ Option 3
- ☐ Option 4
- ☐ Option 5
- ☐ Option 6

(See USPS Pub 8, *Address Change Service*, for a complete description of the Second-Class ACS Notification Options)

## ACS Participant Code Information

Please list below the mailpiece title(s) for which you are requesting ACS Participant Codes. You will be notified of the codes within 10 days of receipt of your application. Photocopy for additional pages, if needed.

| Mailpiece Title | With Keyline | Keyline Length | Attribute* | Shipper Paid Forwarding (Fourth Class Only) | ACS Participant Code (USPS Use Only) |
|---|---|---|---|---|---|
| _____ | _____ | _____ | _____ | Y or N | _____ |
| _____ | _____ | _____ | _____ | Y or N | _____ |
| _____ | _____ | _____ | _____ | Y or N | _____ |
| _____ | _____ | _____ | _____ | Y or N | _____ |

*Keyline attribute must be one of the following: A (Alpha), N (Numeric), or A/N (Alphanumeric)

## Authorization

I hereby authorize the United States Postal Service to provide change-of-address information for the mailpiece(s) listed, under the prescribed terms and conditions of the Address Change Service (ACS).

_____
Name (please print clearly)          Title

_____
Signature                    Date

Complete this application and mail to:

ADDRESS CHANGE SERVICE DEPARTMENT
NATIONAL CUSTOMER SUPPORT CENTER
UNITED STATES POSTAL SERVICE
6060 PRIMACY PKY STE 101
MEMPHIS TN 38188-0001